

## Homework 8

### Teacher & Student Signup System

Create tables in your local Database following below schema(Case Sensitive):

Student(student\_id, name, address) - primary key is student\_id

Teacher(teacher\_id, name, address) - primary key is teacher\_id

Student\_Teacher(student\_id, teacher\_id) - primary key is (student\_id, teacher\_id)

Goal:

Create a M:N relation mapping and setting up the proper entity you need.

- Teacher Entity with corresponding column with proper annotation. (Point 5)
- Student Entity with corresponding column with proper annotation. (Point 5)
- M:N relationship setting up properly and cascade method if needed. (Point 10)
- Complete the regular teacher controller and use JPA repository:
  - Create teacher API (Point 5)
  - Get All teacher API (Point 5)
  - Get teacher by teacherId API (Point 5)

- Create a Signup Controller and implement the functionality:
  - Signup API to sign 1:1 relation between A student with A teacher (Point 10)

### **Note before functionality check:**

Pls add a readme file in your project, and guide TA how to connect your database.

If you are using default one mySQL just following the standard format, QA can connect with their local mySQL server to test the details.

If all not working, QA need to reach out the person, and setup a video call to check the functionality. You might need to share the screen during that call (Zoom or Skype).

For QAs, please make sure the code for demo is exactly coming from the git commitment for HW8.

### **Functionality test:**

- Create a teacher Andy, and get by id shows the details. (Point 5)
- Create a teacher Anna, and get by id shows the details. (Point 5)

- Create a student Amy, and get by id shows the details. (Point 5)
- Signup Amy with Andy, and then get Amy infos can see Andy. (Point 10).
- Signup Amy with Anna, and then get Amy infos can see Andy & Anna. (Point 10)
- Delete student Amy. And then check Database table Student\_Teacher **NOT** have the id of Amy inside. (Point 10)
- Get teacher by id for Andy, the infos still exists. (Point 5)
- Get teacher by id for Anna, the infos still exists. (Point 5)